

FIG. 1

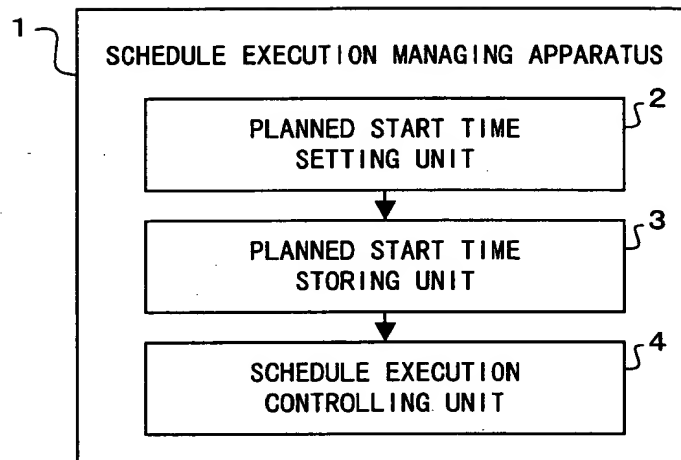


FIG. 1

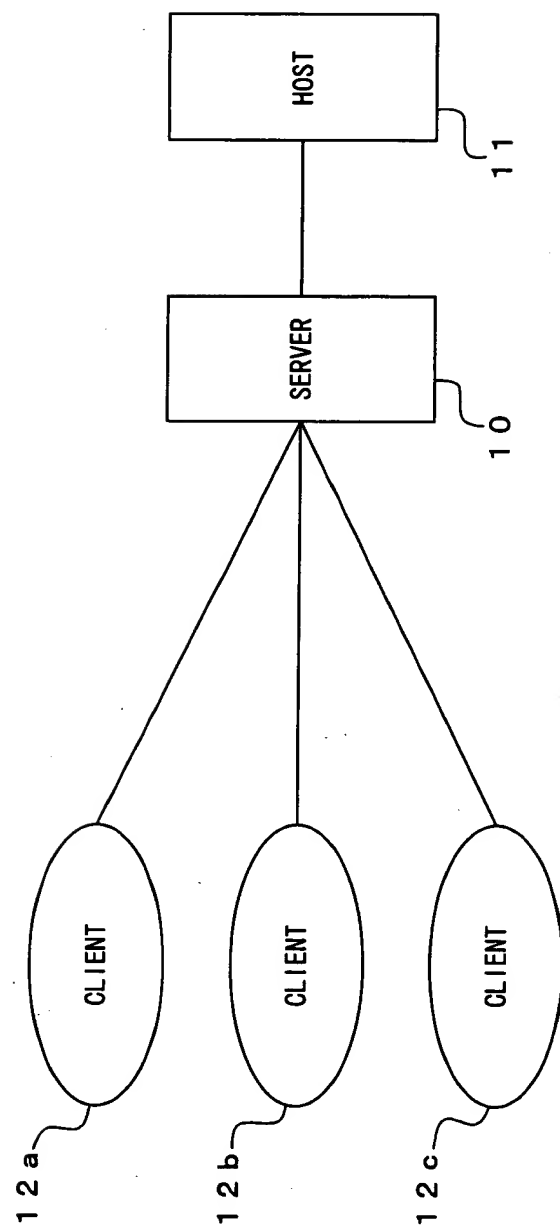


FIG. 2

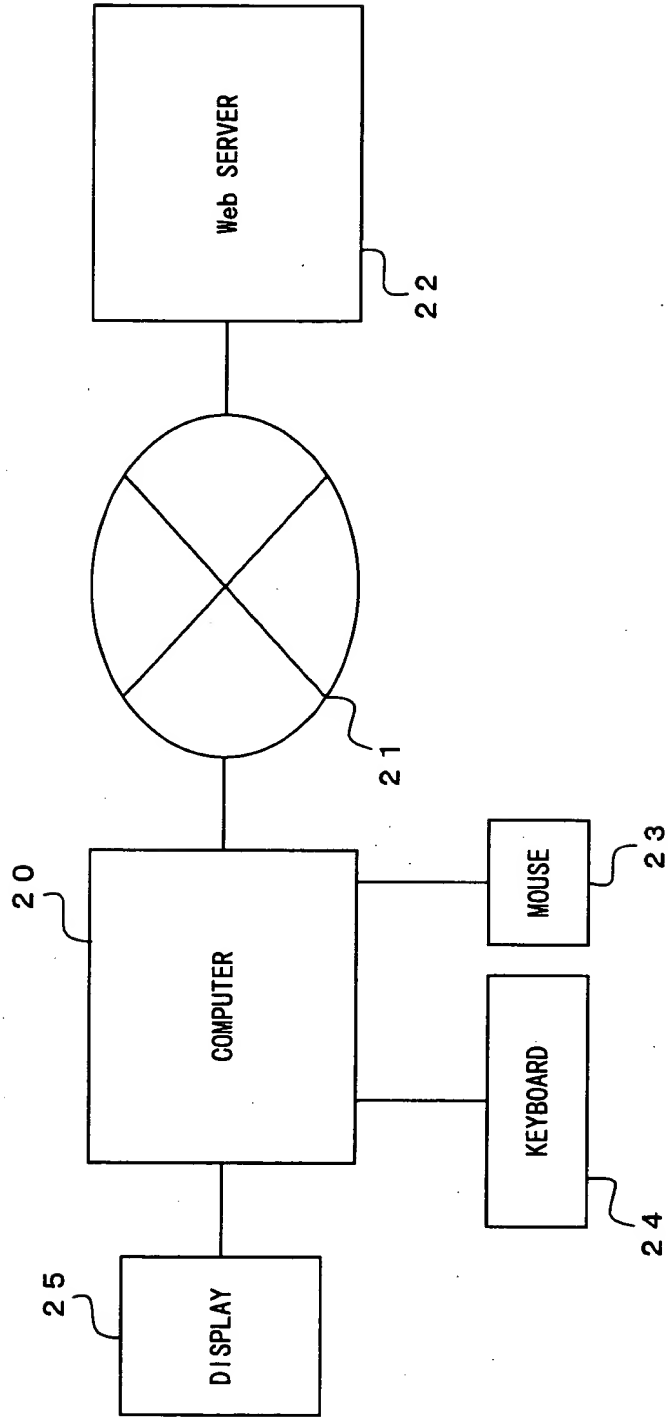
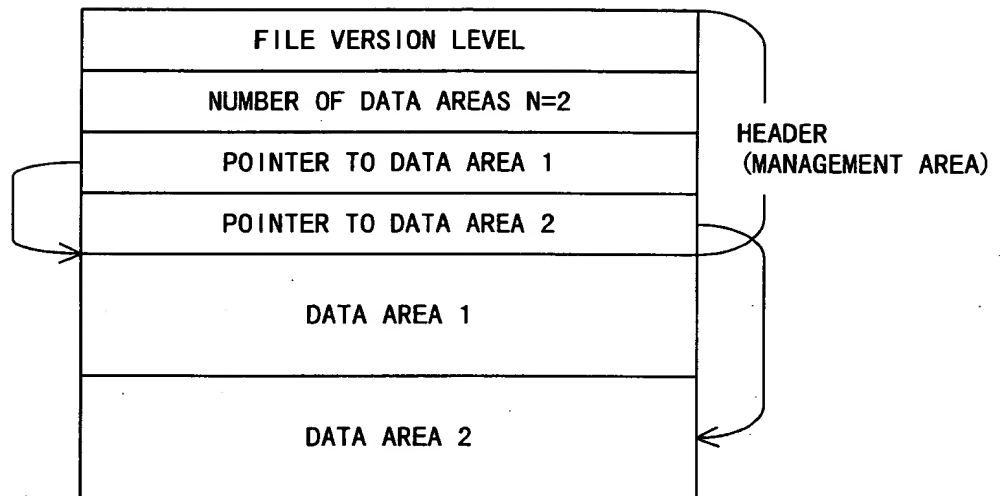


FIG. 3

The diagram illustrates the architecture of a schedule management system, organized into three main functional blocks:

- Schedule Executing Unit (32):** This block contains the core execution logic.
  - Request Processing Unit (36):** Receives **Schedule Information Change Input** and **Schedule Information Change Notification**. It sends **Update/Registration** signals to the **Base Timetable (38)** and **Timetable (39)**, and **Read** signals to the **Schedule Information File (33)**.
  - Schedule Execution Managing Unit (37):** Manages the execution process, sending **Invoking Threads** to the **Execution Threads (40)** and receiving **Execution Request** (to which executed schedule name/contents are attached) from them. It also sends **Reference** signals to the **Timetable (39)** and **Base Timetable (38)**.
  - Execution Threads (40):** Multiple threads (40<sub>1</sub> to 40<sub>n</sub>) that execute schedules and send **Execution Result** (to which executed schedule name/contents are attached) back to the **Request Processing Unit (36)**.
  - Timetable (39) and Base Timetable (38):** Data structures used for scheduling, receiving update and reference signals.
- Schedule Reserving Unit (31):** Manages the reservation of schedule information.
  - Editing Unit (34):** Receives **Schedule Information Change Input** and sends **Change Notification Request** to the **Change Notifying Unit (35)**.
  - Change Notifying Unit (35):** Sends **Schedule Information Change Notification** to the **Request Processing Unit (36)**.
- Schedule Information File (33):** A storage component that interacts with the **Request Processing Unit (36)** via **Read** and **Read/Write** operations.

FIG. 4

[illegible]

**FIG. 5**

00041074 00000000

NUMBER OF RECORDS N1
RECORD 1
RECORD 2
· · ·
RECORD N1

F I G . 6

[illegible]

RECORD LENGTH	SCHEDULE NAME	EXISTING ATTRIBUTE INFORMA- TION	TIME SPECIFI- CATION CLASSI- FICATION	OFFSET	DEPEND- ENCY SOURCE SCHEDULE NAME	BASE TIME NAME	SCHEDULE CONTENTS	VARIABLE LENGTH
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FIG. 7

NUMBER OF RECORDS N2		
BASE TIME NAME 1	}	RECORD 1
BASE TIME 1		
BASE TIME NAME 2	}	RECORD 2
BASE TIME 2		
⋮		
BASE TIME NAME N2	}	RECORD N2
BASE TIME N2		

**FIG. 8**



TABLE 10-100

VARIABLE LENGTH										
RECORD LENGTH	CHANGE FLAG	SCHEDULE NAME	TIME SPECIFICATION CLASSIFICATION	PLANNED START TIME	END TIME	OFFSET	DEPEND-ENCY SOURCE SCHEDULE NAME	BASE TIME NAME	STATE	SCHEDULE CONTENTS

FIG. 9

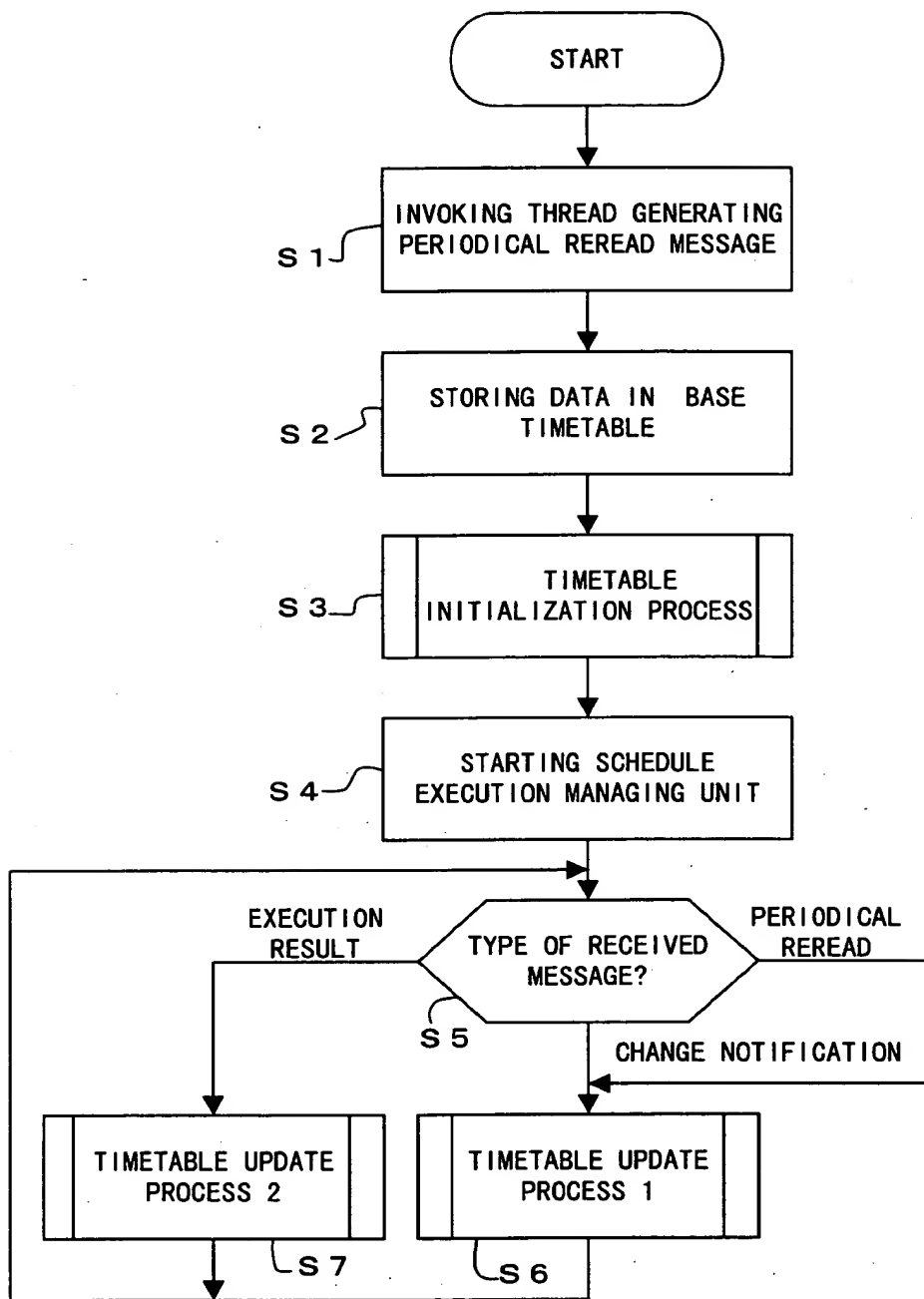


FIG. 10

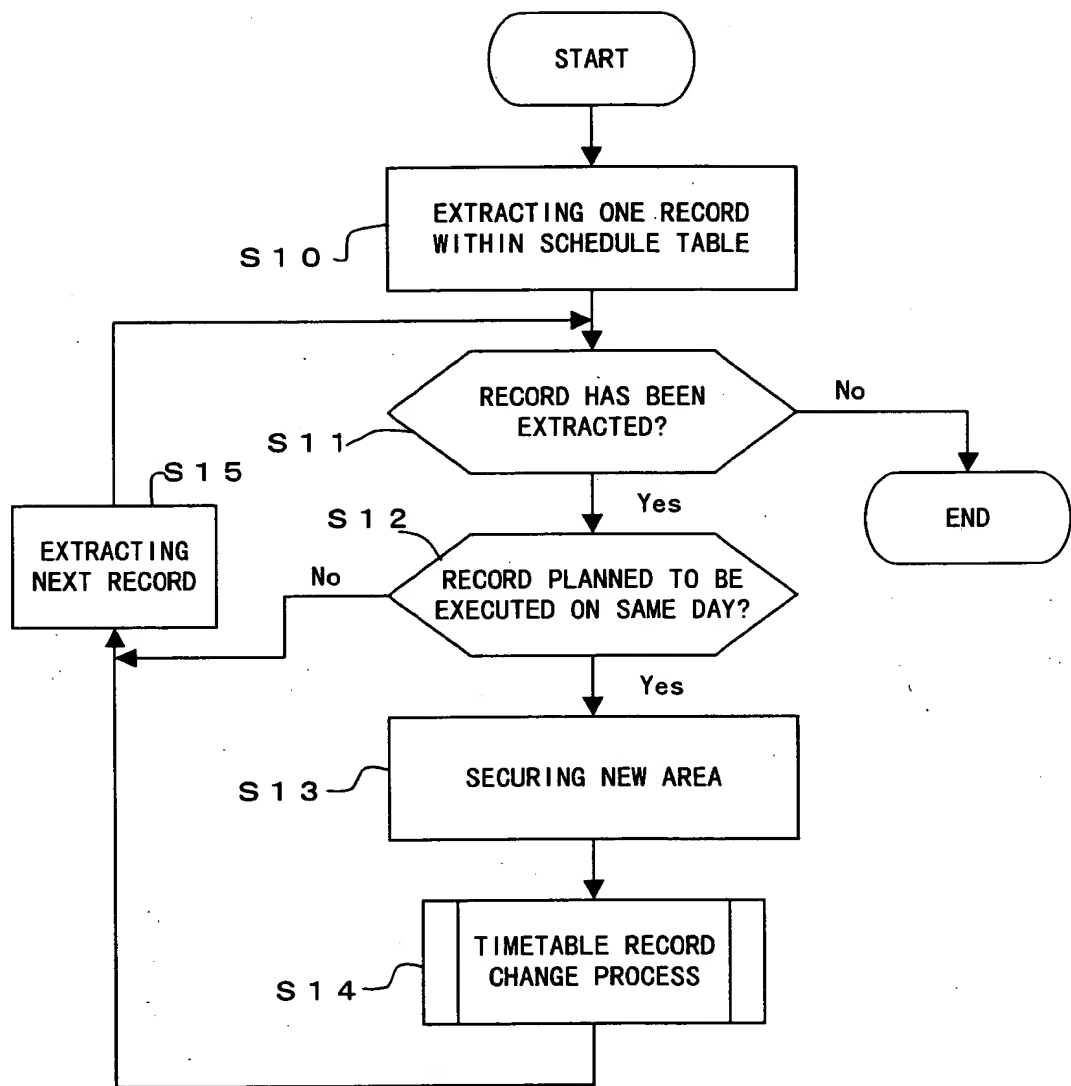


FIG. 11

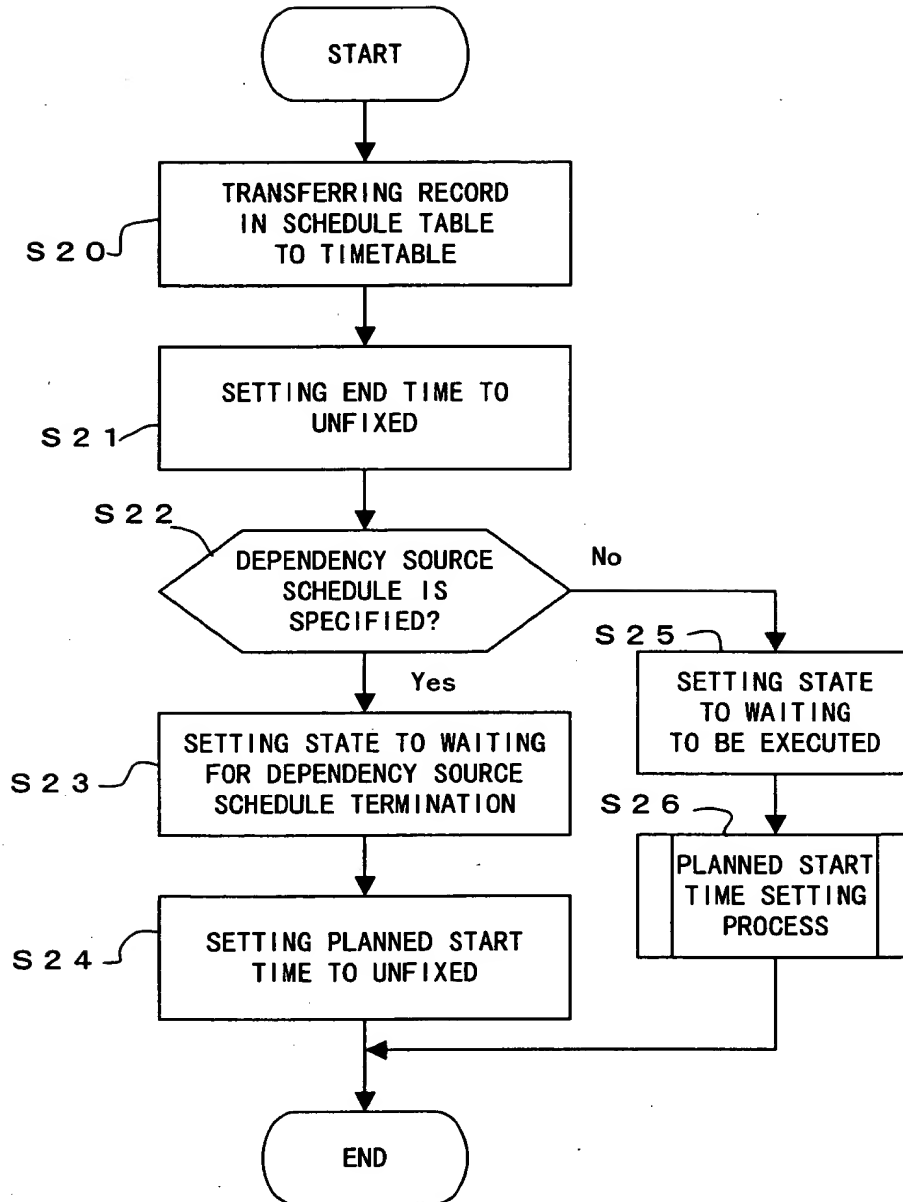


FIG. 12

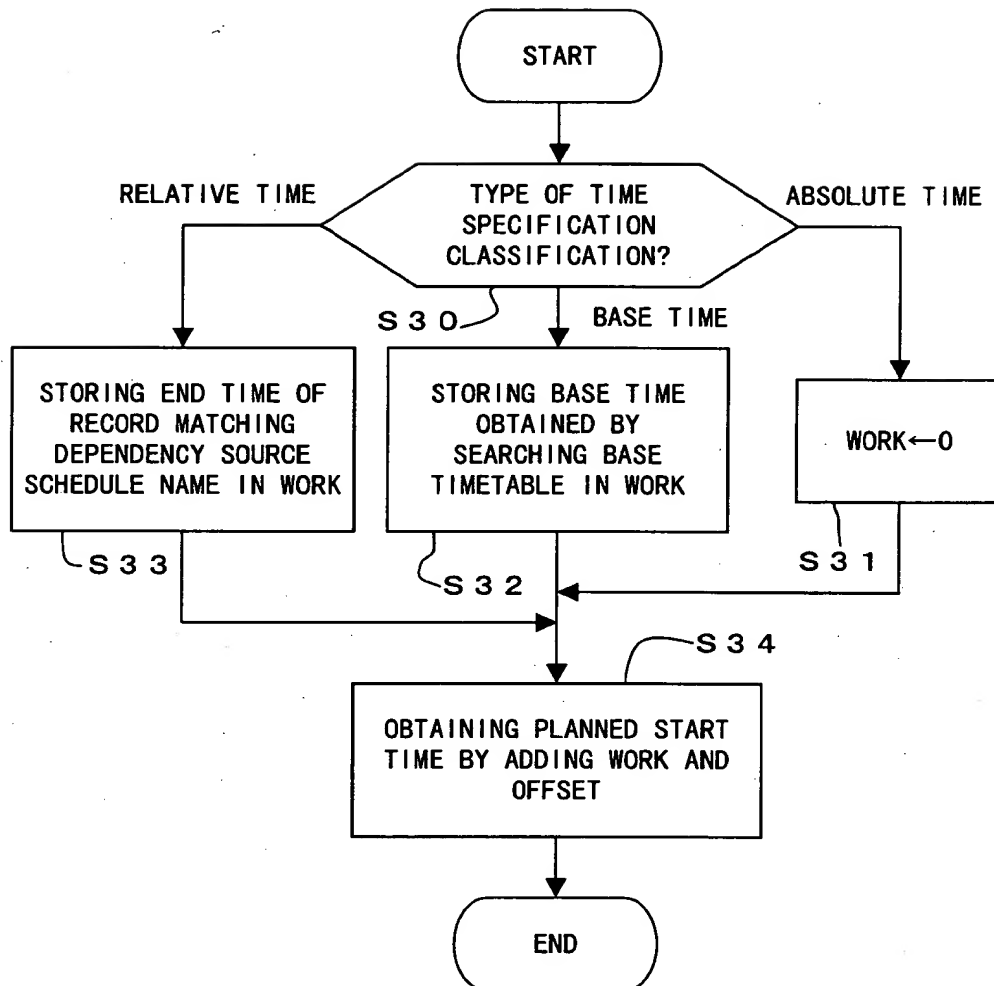


FIG. 13

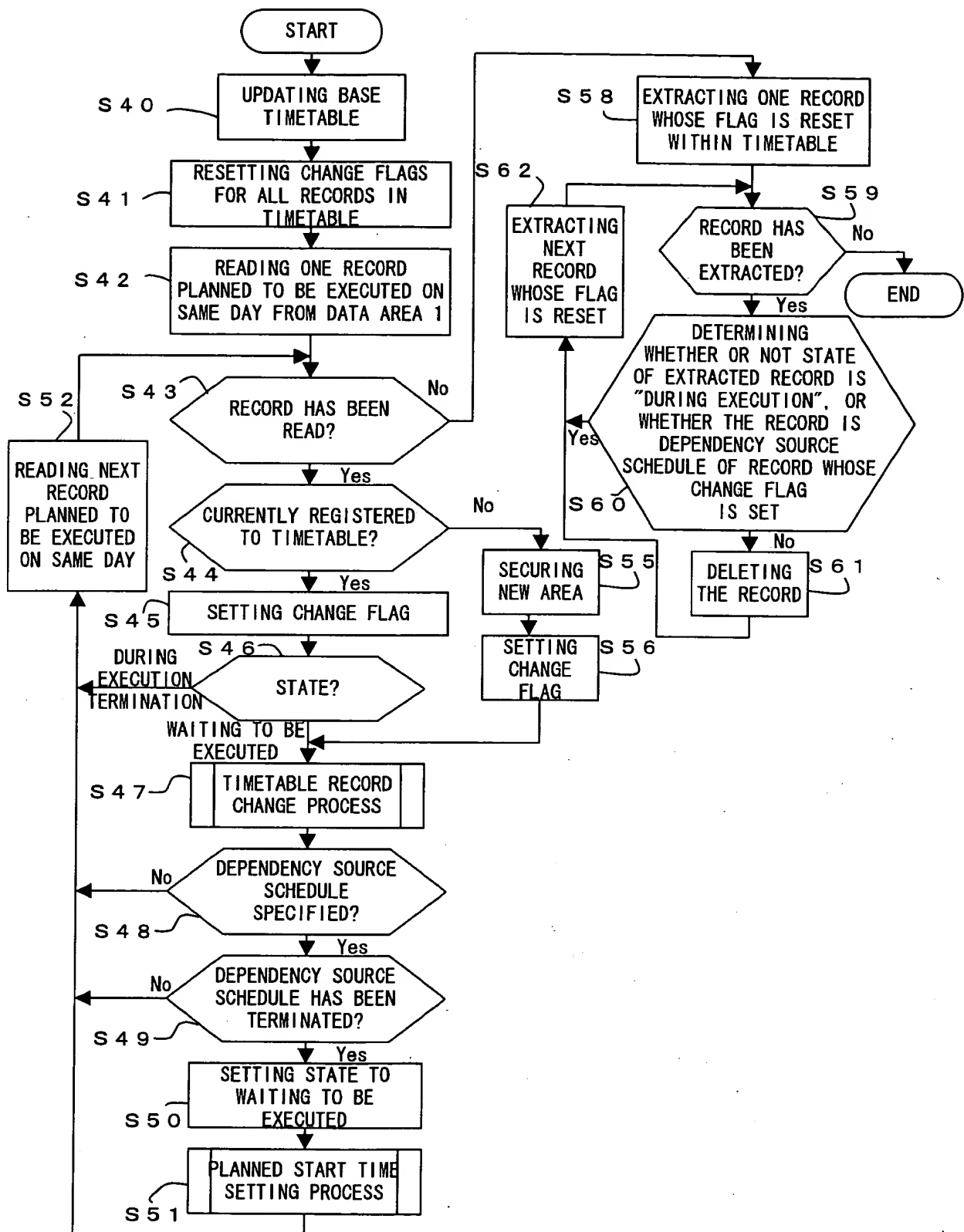


FIG. 14

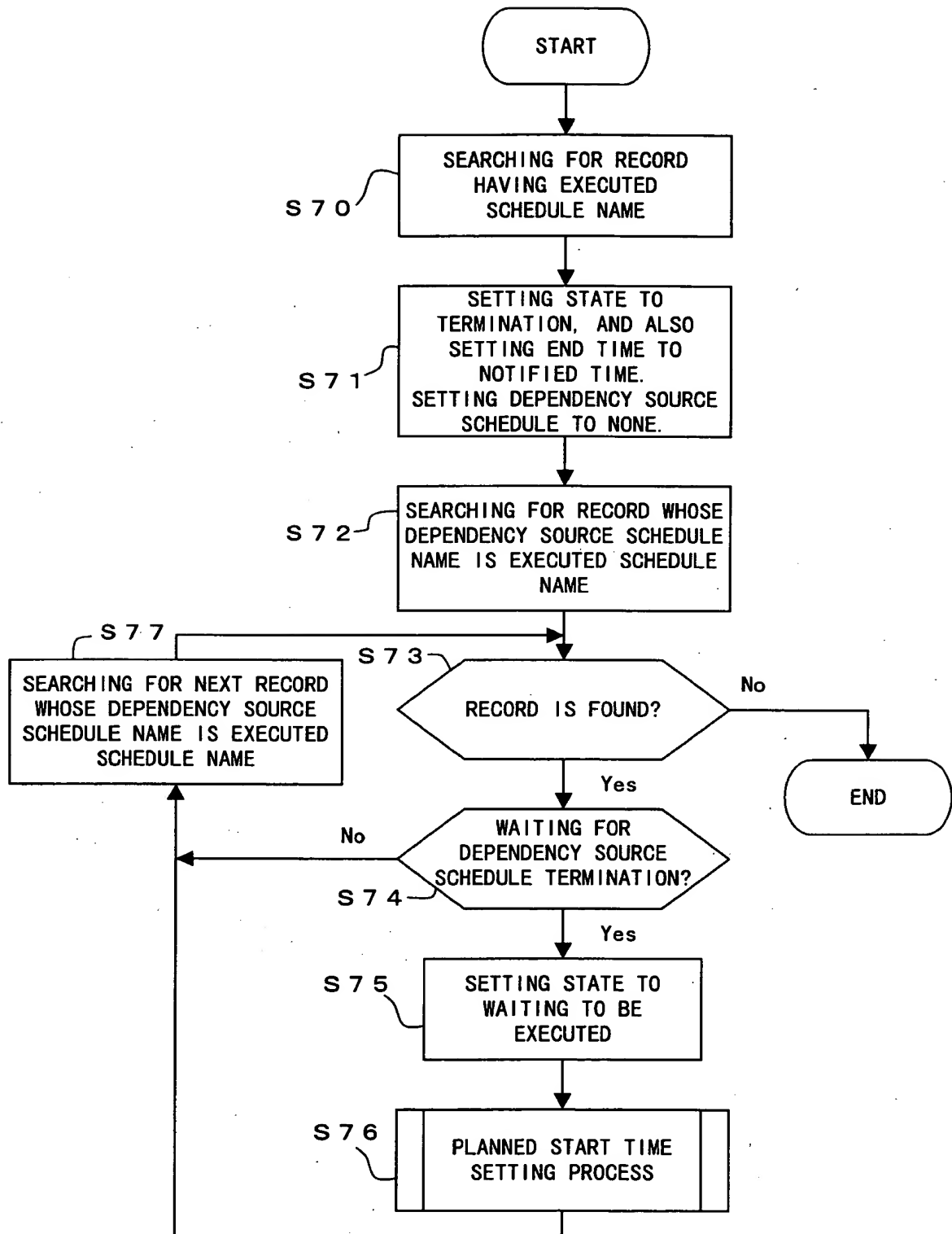


FIG. 15

SCHEDULE NAME	TIME SPECIFICATION CLASSIFICATION	DEPENDENCY SOURCE SCHEDULE NAME	BASE TIME NAME	OFFSET
S1	ABSOLUTE TIME SPECIFICATION	NONE	NONE	19:00
S2	ABSOLUTE TIME SPECIFICATION	S1	NONE	19:40
S3	BASE TIME SPECIFICATION	NONE	B1	00:20 (offset)
S4	BASE TIME SPECIFICATION	S1	B1	00:40 (offset)
S5	RELATIVE TIME SPECIFICATION	S3	NONE	00:40 (offset)
S6	BASE TIME SPECIFICATION	NONE	B1	00:00 (offset)

**F I G. 1 6**



09014071 032204  
102220 12011650

BASE TIME NAME	BASE TIME
B1	18:00

FIG. 17

102220 " 2011350

	S1	S2	S3	S4	S5	S6
17:50	A	B	A	B	B	A
18:00 (B1)	A	B	A	B	B	C
18:10	A	B	A	B	B	D
18:20	A	B	C	B	B	D
18:30	A	B	D	B	B	E
18:40	A	B	D	B	B	
18:50	A	B	E	B	A	
19:00	C	B		B	A	
19:10	D	B		B	C	
19:20	D	B		B	D	
19:30	E	A		C	D	
19:40		C		D	E	
19:50		D		D		
20:00		D		E		
20:10		E				

A: WAITING TO BE EXECUTED  
B: WAITING FOR DEPENDENCY SOURCE SCHEDULE TERMINATION  
C: START  
D: DURING EXECUTION  
E: TERMINATION

FIG. 18

	S1	S2	S3	S4	S5	S6
17:50	A	B	A	B	B	A
18:00	A	B	A	B	B	A
18:10	A	B	A	B	B	A
18:20	A	B	A	B	B	A
18:30	A	B	A	B	B	A
18:40	A	B	A	B	B	A
18:50	A	B	A	B	B	A
19:00 (B1)	C	B	A	B	B	C
19:10	D	B	A	B	B	D
19:20	D	B	C	B	B	D
19:30	E	A	D	A	B	E
19:40		C	D	C	B	
19:50		D	E	D	A	
20:00		D		D	A	
20:10		E		E	C	
20:20					D	
20:30					D	
20:40					E	

A: WAITING TO BE EXECUTED  
B: WAITING FOR DEPENDENCY SOURCE SCHEDULE TERMINATION  
C: START  
D: DURING EXECUTION  
E: TERMINATION

**FIG. 19**

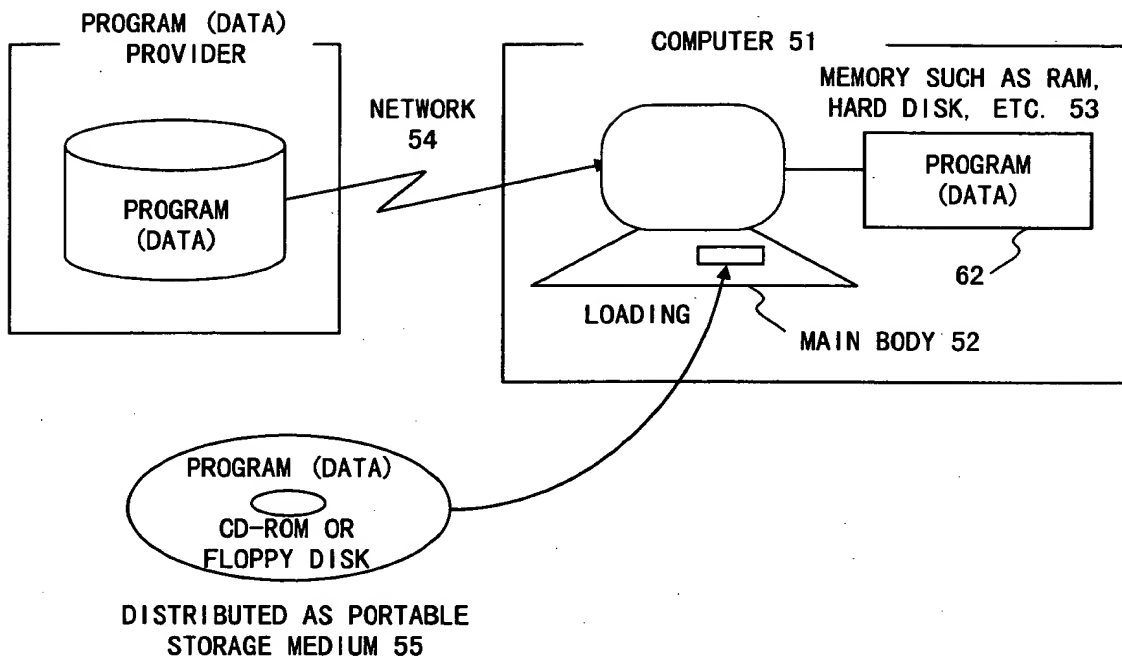


FIG. 20